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A HEALTH EDUCATION PROGRAM IN A HOSPITAL

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The concept of an organized and planned health education program in a general hospital is a comparatively recent development. At first glance an organized health education program seems difficult to attain in a general hospital because of its multiple services and divisions. At the Los Angeles County General Hospital it seemed impossible. The hospital, with a capacity of 3,700 beds, includes an acute unit, a psychiatric hospital, a communicable disease hospital, a chest medical unit and an osteopathic hospital. In the outpatient department alone between 2,000 and 2,500 patients are seen daily.

In 1953 the Director of Nursing Services and Education at the Los Angeles County General Hospital proposed the idea of a health education program for outpatients of the hospital for the following reasons:

1. The hospital is a logical place for health education because the patient is already concerned with a health problem. He will, therefore, be more ready psychologically for health instruction.

2. The county hospital has large numbers of patients with chronic diseases such as heart disease. Education is of great importance to help them live with their condition.

3. Public hospitals with their multiple beds in the same room and clinics are able to use group instruction to reinforce the individual instruction of the therapist.

4. It is sound economics to educate the patient to prevent relapses and readmissions. This will result in more beds being made available for the acutely ill.

County Participation

Because the county hospital had no funds available for this program, and because it was felt the community would wish to participate in it, several voluntary agencies were approached. It was suggested that they unite their efforts to help develop a health education program at the Los Angeles County General Hospital. The Los Angeles County Tuberculosis and Health Association agreed to underwrite the salary of the health educator and incidental expenses for three years. There was an understanding that other agencies would be asked to contribute financially or participate as they could. A sum was also provided by the Tuberculosis Association for the purchase of materials and equipment.

Health Education Advisory Committee

A health education advisory committee of hospital staff and community representatives was organized to launch the program. From the hospital staff are the director and his executive assistant, the medical director and his executive officer, and the directors of nursing service and medical social service. Members from the community include a representative from the health education sections of the city and county health departments, a board representative from the Los Angeles County Heart Association and the Tuberculosis Association, and the executive directors of the Los Angeles chapters of the American Cancer Society and the Tuberculosis Association. A professor of health education from the School of Public Health at the University of California at Los Angeles is also a member of the committee.

Terms of office are for three years, on a rotating basis with a chairman appointed for a two-year period. The health educator acts as secretary to the committee but is not a member of it.

Appointments to the committee are made from two viewpoints, those who are interested and those who should be interested. Representation is based on the following considerations:

1. Not less than one-third of the members must be from the hospital staff.

2. Representatives from the voluntary community agencies must be either board members or executive directors.

3. Such other professional persons deemed desirable because of special qualifications may be members.

The functions of this committee are to advise the hospital administration on the development of the health education program, to assist in the development of long-range plans for health education in the hospital, to interpret the purpose and functions of organized health education in the hospital and community, and to act as a co-ordinating group for any agency which wishes to participate in the program.

The advisory committee has no administrative powers. The supervision

and administration of the health education service is under the executive officer, who is responsible to the medical director. Funds for the service are deposited with the attending staff association. The health educator and the part-time secretary are considered hospital employees responsible to medical administration.

Financial support for the program currently is being supplied from various sources. The Tuberculosis Association is still providing the major portion of the funds, paying the salary of the health educator and incidental expenses. The salary of the secretary is provided by the Los Angeles Chapter of the American Cancer Society. This year the hospital agreed to include in the medical budget a sum to cover the cost of materials to be used for patient education.

Health Educator Employed

In September, 1954, the health educator was employed and spent several months becoming oriented to the hospital, its staff and resources, and the educational needs of the patients. During the interviews with the staff, it appeared that although few people were aware of the community or hospital resources in education, there was a consensus as to what patients ought to know. It was felt that there were three general areas of education which needed to be developed. Education for health, such as personal and family hygiene and basic nutrition, was one. Another was education for specific conditions, such as instruction of cardiacs and diabetics to help them live with their disease. The third was orientation of the patient to hospital routine and services.

After this preliminary poll the advisory committee appointed a temporary planning committee to aid in defining goals and general activities of the health education service. It was not long before it was realized that education for outpatients alone would not be sufficient. Education should begin at the time of admission and diagnosis.

The present objectives of the health education program are: (1) to provide necessary health education for inpatients, outpatients and their families; (2) to develop staff in-service training to insure co-ordination in the team approach to health education and to clarify staff's role in the education of the patient; (3) to provide opportunities for students in the field of medical care so that they may become aware of the value of preventive medicine and of the health education resources in the community; (4) to bring to the hospital for the benefit of the patient the health education resources of the community and to provide an opportunity for community agencies to extend their programs to the hospital.

Continuous evaluation of objectives may change the goals to conform to changing needs, and might result in a corresponding shift in activities and functions of the health education service.

Health Education Service Responsibilities

In order to achieve the foregoing goals, the health education service was delegated the following responsibilities:

Staff Planning. On request, the health educator works with hospital staff to plan and develop organized health education programs within the various services. This is usually achieved through regular staff conferences or through special committees organized for this specific purpose.

Resource Services. The health education office secures health education materials, literature, films, posters, etc. If necessary, special materials are developed to meet the peculiar needs of the hospital. It provides information and maintains a depository of teaching aids and maintains audiovisual equipment.

In-service Training. The health educator provides consultation as well as direct instruction to the staff regarding teaching principles and techniques useful in patient education.

Co-ordination. If no staff member within the service involved is available, the health educator coordinates organized programs of patient education.

Community Contact. The health educator interprets to community agencies and groups the health education needs of the patients and brings to the hospital health education resources of the community.

So far, the direction which the program has taken has been determined by the magnitude of the problem, as well as the individual interest which hospital personnel have in it. In a hospital with more than 3,700 beds plus 2,000 to 2,500 outpatients daily, and a perpetual shortage of staff in all fields, the need to provide only the basic essentials of medical care may assume major importance. The constant shift in personnel makes it almost impossible for patient education programs to get started before new staff must become involved. To add to the difficulties, because of the physical arrangements, clinics do not lend themselves readily to group teaching even though this method of education may be more effective and economical than individual conferences and can add to the efficacy of therapeutics.

The whole matter of evaluation has been exceedingly difficult to clarify. We can, to some degree, evaluate the program in terms of the increased interest in patient education and the development of an in-service education program in nursing which attempts to give nurses and attendants practical concepts in approaches to patient education.

The health education service cannot alone claim credit for the increasing emphasis on patient-centered care, since the modern trend in hospital care is toward this philosophy. It is true, nevertheless, that discussions of cultural as well as individual differences and the increasing use of specially designed materials has contributed to orientation of staff toward a more personalized approach to the patient.

New Methods Tried

The health education project has also served as a laboratory in which new ideas in hospital programing have been explored and are currently being tested. In the past, professional staff has decided what the patient does or does not know. As a result of interviews with patients conducted by the health educator, the staff has seen the need to provide specific written instructions which patients want at the time of discharge. At this time, an instruction sheet filled out by the physician and given to the patient at the time of discharge is being tested in two wards. (*Editor's note:* Patients in the two wards are divided

into two groups, one of which receives the instruction sheets at the time of discharge while the other does not. Hospital residents evaluate the effectiveness of the instruction sheets in helping the patients carry out orders by comparing the two groups.)

In the chest medical service, formerly known as the tuberculosis unit, special diet instructions in Spanish are issued to elderly Mexican diabetic patients. The instruction sheet is not a direct translation of the American diet regularly recommended. It is an adaptation in which certain culinary habits and dietary preferences of Mexicans have been incorporated in the recommended list of foods for diabetics.

In a special reconstruction or rehabilitation ward, patients who were formerly left to their own devices except during periods of specialized therapy, are now being encouraged to use whatever talents and resources they possess. Some may fix electrical equipment, others help in the occupational therapy workshop or on the wards assembling charts and engage in other easy but necessary tasks. Entertainment movies are offered once a week to help dispel boredom and keep the patients happier.

A significant contribution to the program has been renewed emphasis on interstaff co-operation and the use of community resources for the benefit of the patient. An example of this is the group teaching program in one of the cardiac clinics, now in its second year. Here a series of meetings are offered once a week from 9 to 9.30 a.m. Attendance is voluntary, but on the day of the meeting when patients register they are advised that they may attend the discussions listed for that day. A large poster opposite the registration desk indicates the topic of discussion. Patients are assured they will not miss their appointments. Low sodium diets, work-saving techniques, permissible activity, the hospital team and general aspects of heart disease are discussed. Instructors include a dietitian, a home economist from the Heart Association, an occupational therapist, the health educator and a doctor.

Many Disciplines Act as Teachers

Because of the shortage of personnel, the hospital has made interesting use of volunteers in teaching. With the co-operation of the California Association for the Prevention of Blindness, two volunteers were trained to lead discussions on glaucoma and the importance of following prescribed care under qualified medical personnel. These sessions were very popular with patients. This program of group instruction, like several others, has had to be temporarily discontinued since the pressure of work on the nursing staff makes it extremely difficult to refer patients to the sessions.

The inclusion of students in a hospital health education program has, of course, been one of the objectives. This year a pilot program designed to provide a new area of experience for dental hygienists has been worked out with the School of Dentistry at the University of Southern California. Senior dental hygienists devote two hours to oral hygiene instruction in children's wards at the hospital. The students come in teams of three once a week. The Dental Auxiliary provides toothbrushes which are given to the children after the lesson. Some of the hygienists have already indicated that they would like to volunteer on their own time to give this needed instruction for the little patients.

Lectures are given by the health educator to the nursing students on cultural differences and their implications for health teaching. Since students are required to take a course in sociology, emphasis is placed on the application of sociological concepts in teaching the hospitalized patient.

In-service training with newly employed nurses and attendants now includes regularly scheduled discussions on cultural differences, and education principles and techniques that can be used in teaching the patient in the staff's daily contact with the patient.

Resource people and consultants from local colleges and community agencies have participated in programs for nursing supervisors and instructors designed to develop further their understanding of the patient's culture as well as their own. Some pretesting and post-testing in a series of five meetings has indicated that there is a change in attitudes.

A fascinating aspect of the program is the willingness of some of the staff to examine their current practices and routine in the light of their effect on patient education. In the chest medical unit, patient interviews have indicated patients are not sufficiently informed regarding their ailment. Results of the interviews indicated the need for clarification as to the communicability of tuberculosis. A subcommittee composed of a doctor, nursing supervisor and nursing instructor is currently studying this problem. They have been visiting other tuberculosis hospitals to learn what is being done elsewhere, in order to compare this with their own procedures. Routines may be changed to conform to a more current concept in tuberculosis services. Patient education will be geared to make sense to the patient as well as to the staff.

Along with activities in staff education, the health education service has been busy developing literature designed to help the staff in educating patients or their families. Manuals for outpatients and tuberculosis inpatients, a leaflet for parents of pediatric patients, a simple brochure explaining donations to the blood bank, a booklet for tonsillectomy patients and several other brochures have been printed.

Exhibits on dental health and other subjects, provided by various health agencies, are shown in the lobby of the hospital. In general, the hospital attempts to co-operate with voluntary agencies in their educational campaigns by placing their material on racks throughout clinics.

Accomplishments

In retrospect, it is always well to examine the accomplishments in terms of the goals that were first established. We have demonstrated that group education is possible under circumstances previously considered insurmountable. We have begun to pave the way for overhauling education in at least one unit of the hospital. New concepts in line with sound educational practices are being introduced in some clinics. Patients are being consulted more and more regarding their preferences, attitudes and way of life. The in-service training instructors for nurses and attendants regularly use the health educator as a resource person in educational techniques. Professional staff is becoming more aware of the importance of us-

ing vocabulary which is comprehensible to the patient.

The goal to include community agency participation has been partially realized with the contribution in 1956 from the Cancer Society for a half-time secretary in the health education service. The American Red Cross, the Los Angeles County Heart Association and the Crippled Children's Society have contributed instructors for teaching patients or their relatives. Other agencies have made generous contributions of materials.

We are beginning to centralize requests for the distribution of educational materials in one department instead of in each individual service. Gradually, materials are being revised not only to bring information up to date but to facilitate readability and increase interest.

Future plans include efforts to orient doctors to community as well as hospital resources in education.

A comprehensive program of in-service training for all personnel is still a dream of the future. Health education needs to be as much a part of this training as an understanding of the staff's role in the care of the patient.

The vast resources of a metropolitan community such as Los Angeles are as yet largely untouched. Many of the voluntary agencies still need a more lucid interpretation regarding the potential for them in participating in a hospital health education program.

Throughout this exploratory period the health education service has been most encouraged by a hospital administration that has recognized that the public hospital has the opportunity to teach and help its patients to practice constructive health habits. Some day we hope to be able to measure the effectiveness of our health education program by the number of patients who are rehabilitated for useful lives and the number to which readmissions are reduced.

Strains of bacteria that have developed a resistance to penicillin can now be found in persons who have never had the antibiotic.—*Science Newsletter,* August 24, 1957.

Rabies Advisory Committees Hold Initial Meetings

Six regional rabies advisory committees have been named by Malcolm H. Merrill, M.D., Director of the California State Department of Public Health, as provided for in the Rabies Control Law which became effective September 11, 1957.

The new law provides for establishment of regions comprising two or more counties, appointment of nine-member regional rabies advisory committees, and declaration of counties as "rabies areas" by the director of this department after consultation with and approval of the advisory groups.

The regional committees shall consist of a local health officer, a physician, a veterinarian, mayor of the largest city within the region, chairman of the board of supervisors of the largest county in the region, and such members of the livestock-owning, dog-owning, civic and humane groups as the director may appoint.

Upon declaration of a county as a "rabies area," the law requires the vaccination and licensing of all dogs over four months of age, the maintenance of a pound and pick-up system, and the holding of low-cost public vaccination clinics.

The department has thus far established six regions and appointed rabies advisory committees for each. A combined meeting of all regional groups was held in Berkeley, September 13th. Purpose of the combined session was to get acquainted, to review the problem of rabies in California, to consider the general problem of rabies control, and to become familiar with the new legislation and their responsibility for making it effective in local programs.

The six regional committees, Los Angeles, Fresno, San Francisco, Salinas, Eureka and Chico, have met. Purpose of these regional meetings is to review specific background data on the past occurrence and present status of rabies within the regions, and to discuss state and local control action since October 8, 1955; to review the proposed revisions in rabies control regulations based upon the new law; to obtain advisory committee approval as to specific counties to be declared "rabies areas," and to consider procedural policies relative to operation of the committees.

It is anticipated that official declaration by the director of counties as "rabies areas" will be made the middle of November. Official action of the California Conference of Local Health Officers on the proposed changes in rabies control regulations will be completed October 22d-24th at their scheduled meeting in San Francisco. Official publication of proposed changes will be made on November 13th so as to permit the State Board of Public Health to take action at its Los Angeles meeting on that date.

It is anticipated that local program action will be under way by early 1958.

Recent Additions to Film Library

The following new films and filmstrips have been added to the Health Film Services Library of the California State Department of Public Health since the publication of the 1957 catalog and its supplement:

Handicapped Go Camping 10 minutes 1956

A film report of activities of an unusual children's camp program. Shows typical incidents of the camping day to illustrate how both normal and handicapped children can profit physically and socially from their joint effort and mutual interest in camp activities.

Health in Your Town Filmstrip 42 frames 1957

A presentation of services to the community provided by voluntary, official, and private health agencies. Study guide accompanies filmstrip. National Foundation for Infantile Paralysis. Junior high social studies and health classes.

Kid Brother 25 minutes 1957

The film explores some of the hidden emotional forces that lie behind excessive drinking. Reveals behavior problems which appear on the surface to be concerned with alcoholism, in young people, but which may be an expression of the many difficulties that adolescents face in adapting to the world around them, including social pressures which lead to drinking. Designed for discussion with teen-agers, but also effective for discussions by parents, teachers, and others concerned with young people, and their problems. Affiliated Films.

The Other City Color 22 minutes 1957

Using Racine, Wisconsin, population 75,000 as a subject, this film points to the need for early cancer detection. Seven citizens of Racine are used to demonstrate the seven danger signals of cancer. American Cancer Society. For community groups, high school and adults.

Causes of Child Pedestrian Deaths Are Recorded in Los Angeles Study

A speeding or drunken driver does not appear to be the cause of the typical child pedestrian death in Los Angeles, according to a study conducted by Dr. Phyllis Wright, special consultant in pediatrics to the department.

The report, which covered the causes of death of 85 children under 15 years of age who were killed as pedestrians or cyclists in traffic accidents during 1952-55, said that "it appears that the typical child pedestrian fatality is not, as might be supposed, the victim of a speeding or intoxicated driver who mows the child down before he can escape.

"Rather," continued the report, "he is typically a small child, often a preschooler, who, while playing without supervision in front of his home, darts out into the path of an unfortunate driver. He is often not observed by the driver of the car, perhaps because of his small size. Usually he dies of a head injury before adequate medical and surgical treatment can be instituted."

The report said that "from these data it is apparent that better traffic engineering, more traffic lights and stop signs, or better law enforcement of existing traffic laws, will not provide the answer to the problem of the child pedestrian fatality.

"Perhaps the greatest inroads into the problem will be made by an educational program beginning in the well-baby clinics and the pediatricians' offices and carried over into the school years by parent-teacher groups.

"The fact that so few accidents now occur in the neighborhood of schools does not mean the problem of traffic accidents has been solved by present traffic control methods in these locations," the report continued.

Dr. Wright said, "It may mean that in concentrating on devices such as yellow crosswalks, stop signs and crossing guards, we may be creating a false sense of security in the child who is thus taught to believe that he may enter and cross safely in any crosswalk without exercising due caution in looking for oncoming cars."

The report declared, "City planning should insist on adequate backyard and traffic-free playground areas for children as well as a return to sidewalks. The current trend in new Los Angeles subdivisions toward 'country estates' on small lots without sidewalks is deplorable, and often results in tragedy for the new homeowner whose children must walk in the roadway to visit their playmates."

The report concluded with the recommendation that better traffic law enforcement, stiffer penalties and an increasing program of driver education is indicated in the smaller group of pedestrian accidents in which the driver is primarily to blame.

The study was made possible with the co-operation of the Los Angeles City Police Department and the Coroner's Office of Los Angeles.

Health Department Applications For Project Funds Received

Twenty-five applications for federal general health grant and maternal and child health funds from 16 local health jurisdictions have been received by the California State Department of Public Health. Twelve of the applications propose projects in the field of chronic disease; seven in occupational health and six in maternal and child health. The projects as outlined in the applications cover a wide range of activities in the areas of aging, chronic illness, organized home care, multiple screening, hearing conservation, nutrition education, radiation exposure, and use of insecticides among others.

A total of $222,000; $50,000 for maternal and child health and $172,000 for chronic disease, aged and occupational health; is available for allocation to approved projects. These funds became available following approval by the Conference of Local Health Officers for the use of federal maternal and child health funds for special MCH projects in local health departments, and approval by the Committee on Administrative Practices of the conference for the use of the increase in federal general health funds for special demonstration programs rather than the present allocation by per capita formula.

Project applications are currently being reviewed by department staff following which priorities will be determined by an advisory committee. Final approval, based on the committee's recommendations, of projects will be made by Malcolm H. Merrill, M.D., Director, California State Department of Public Health. Funds will be allocated up to $20,000 per project per year in maternal and child health services, and up to $50,000 per project per year in the three other fields. Projects are limited to a three-year period, subject to review annually. The funds tentatively will be allocated December 1, 1957.

Members of the advisory committee are: Merle Cosand, M.D., San Bernardino County Health Officer; Mr. Albert G. Feldman, Director, Health Division, Welfare Planning Council, Los Angeles Region; L. S. Goerke, M.D., Associate Dean, School of Public Health, UCLA; Charles A. Pruess, M.D., Santa Barbara; Robert H. Alway, M.D., Acting Dean, School of Medicine, Stanford; Ellis Sox, M.D., San Francisco City and County Health Officer; R. A. Stallones, M.D., School of Public Health, UC; Malcolm S. M. Watts, M.D., Assistant Dean, School of Medicine, UC; and Henrik L. Blum, M.D., Contra Costa County Health Officer.

Bacteriology Lab Will Join National Strep Disease Probe

The Bacteriology Laboratory of the California State Department of Public Health will participate in a nationwide streptococcal disease investigation headed by Dr. Milton Saslaw of Miami, Florida. Streptococci are an important cause of glomerulo nephritis and are believed to be the etiologic agents of rheumatic fever.

However, the actual incidence of rheumatic heart disease varies tremendously with geographic areas of the Country, and in an attempt to solve some of the riddles of these infections and the relationship to streptococci, eight areas in the Nation are working together in a co-ordinated study utilizing laboratory and epidemiologic methods. The basic study will be conducted in the public schools of Berkeley, with the laboratory isolating and identifying the streptococci found. It is anticipated that the study will last between three and five years.

Dr. Merrill Appointed to National Advisory Health Council

Malcolm H. Merrill, M.D., Director, California State Department of Public Health, has been appointed to the National Advisory Health Council by Surgeon General Leroy E. Burney. Members of the council are selected from the leaders in the fields of fundamental sciences, medical sciences, education and public affairs.

As a member of the council, Dr. Merrill will advise and make recommendations to the Surgeon General on matters relating to health activities and functions of the Public Health Service. A major responsibility of the council is to advise the Surgeon General on the awarding of research and training grants to support nongovernmental research, and other special awards to individuals requiring financial support of their research training and research projects.

The council, established by Public Law 692, Eighty-first Congress, is one of nine national advisory councils. Dr. Merrill's appointment is for a four-year period.

Hospital Advisory Board Revises Regulations on Long-term Care

Major action at a recent Hospital Advisory Board meeting pertained to approval, in principle, of revisions to existing regulations which will permit the development of facilities for both ambulatory and nonambulatory patients; and, on the advice of the Attorney General's Office, to eliminate from the regulations general terms such as adequate, proper and sufficient.

The decision of the board to broaden the regulations for institutions providing long-term care was based on studies indicating that only one-third of all persons in these institutions are found to be nonambulatory. The revised regulations will be less restrictive in providing physical facilities for the proper care of ambulatory patients. Under the present regulations nursing homes are required to provide a physical plant capable of accommodating nonambulatory patients.

In other action, the board eliminated the classification of large and small general hospitals. The board also approved the proposal that beds in segregated units of general hospitals used exclusively for psychiatric care and long-term care programs shall not be counted in determining the number of surgeries and other special services required in a hospital.

Other matters under consideration by the board were: application of higher standards to existing hospitals; standards for specialized hospitals; and isolation rooms and care of contagion in general hospitals. The board requested further study of these items.

Medical Society Conducts Glaucoma Screening at Fair

Almost 4,000 persons took advantage of an offer by the San Diego Ophthalmologic Society to examine the eyes of anyone over age 40 for glaucoma at the Medical Society booth at the San Diego County Fair. This public service program was provided under the sponsorship of the San Diego County Medical Society.

A total of 3,986 patients were examined of which 196 were referred to opthalmologists for further evaluation. To date 98 of these have been examined and 33 were found to have definite glaucoma.

Chronic simple glaucoma progresses slowly and painlessly, resulting in irreversible loss of vision. Its cause is unknown but through medication and/or surgery, the progressive blindness due to this cause can be arrested and vision saved. The amount of vision which can be saved depends largely on how early the condition is detected and the institution of careful long-term medical supervision. Glaucoma, therefore, warrants intensive search for early identification.

Surveys in many other areas of the Country have found glaucoma to be present in about 2 percent of the population over 40. The San Diego survey, if the continuing follow-up shows the same trend as currently reported, will probably find some 70 new cases of glaucoma out of the total examined. This figure is close to the previously estimated prevalence and underlines the value, in human and economic terms, of the gift of time and skill from the medical society to the public health of San Diego County.

More Care Needs to Be Exercised In Using and Storing Pesticides

The problem of accidental poisoning of children in California is different than in other parts of the Nation, a recent study at Los Angeles Children's Hospital indicates.

Pesticides containing arsenic were responsible for 28 percent of the childhood poisonings admitted to Children's Hospital in Los Angeles. In other parts of the Country they account for a much smaller percentage of the children admitted to hospitals because of poisoning. Of the 743 cases of poisoning admitted to the hospital during the period 1951-56, 199 were attributed to arsenic. Three of these resulted in the death of the child. Aspirin and salicylates, generally considered to be the number one problem in childhood poisonings, accounted for 126, or 17 percent, of the cases.

In 1956, California recorded 32 deaths, all in the age group one to five, which were due to accidental poisoning. Eleven of these were caused by pesticides and of these nine resulted from arsenical pesticides.

In the home, arsenical pesticides can be found in the form of ant pastes and syrups, weed killers, and snail and rat poisons. It is not enough to merely put the poison out of the reach of the child. Witness the three year old who climbed to a shelf near the roof of a shed and found a bottle of poison. These poisons should be kept under lock and key.

A secondary problem arises from the fact that some of these poisons, such as arsenical weed killer, are purchased as concentrates and require diluting before use. The mixing is generally done in a tin can, jar, or pop bottle which the child associates with food or drink. The problem is further complicated by the fact that many of the ant, rat and gopher poisons are sweetened and colored, again attracting the child.

In five of the 11 fatal pesticide poisonings last year a parent left the pesticide where the child could reach it. In four cases the person was not a member of the family—gardener, baby sitter, former tenant; in two cases it was not possible to determine who had not taken the time to put the poison or mixing container under lock and key.

Adult Dental Needs To Be Studied

What are the dental needs of adults in California? How much dental care do adult Californians receive?

In an effort to find the answer to these questions the Division of Dental Health, California State Department of Public Health, is undertaking a study of a group dental practice, Pernell Dental Group, which has contracted with a large Los Angeles union to provide complete dental care of all union members.

The study began in September, 1957, and is expected to be completed in one year. The first six months will be spent in collection of data on the dental needs of the union members and on the amount of dental care they had been receiving prior to entering the plan. A second six-month period will be required to abstract and analyze the data.

In addition, data will also be collected on the dental care and needs of the members by occupation, age, sex and marital status in an effort to determine how important these variables are in dental health.

The Pernell group plan has been in operation since September, 1954; and at present is providing complete dental care for 15,000 members of the union and one dependent of each subscriber.

Health Officer Changes

Berkeley City

Alvin R. Leonard, M.D., has been appointed health officer for Berkeley City, effective September 23, 1957. He succeeds Alan Foord, M.D. Dr. Leonard for the past seven and a half years has been assistant health officer for the San Diego County Health Department.

Kings County

Bertha E. Stokes, M.D., has succeeded Paul L. Murphy, M.D., as health officer for Kings County. The appointment was effective October 1, 1957.

Siskiyou County

James Philip Taylor, M.D., has been named health officer for Siskiyou County. He succeeds Samuel E. Lamb, M.D. The date of the appointment was September 24, 1957.

Bellflower, Irwindale, Norwalk Cities

The three newly incorporated Cities of Bellflower, Irwindale and Norwalk are receiving health services from the Los Angeles County Health Department, Roy Gilbert, M.D., health officer.

Reported Cases of Selected Notifiable Diseases California, Month of September, 1957

Diseases	*Cases reported this month*			*Cumulative cases from January 1st*		
Amebiasis	212	64	77	1,527	701	541
Anthrax	--	--	--	--	--	--
Botulism	--	--	--	2	4	1
Brucellosis	2	2	2	39	22	44
Chancroid	6	4	15	45	62	116
Cholera	--	--	--	--	--	--
Coccidioidomycosis [1]	11	13	19	145	124	98
Conjunctivitis, acute infections of the newborn	--	--	--	3	7	8
Dengue	--	--	--	--	--	--
Diarrhea of the newborn	--	--	8	19	6	18
Diphtheria	1	1	--	9	26	16
Encephalitis, Acute [2]	52	39	31	425	433	315
Epilepsy	135	246	207	2,375	2,677	2,055
Food poisoning	46	195	306	831	1,173	1,246
Gonococcal infections	1,233	1,238	1,206	12,028	11,362	11,239
Granuloma inguinale	--	--	--	5	1	2
Hepatitis, infectious	108	128	132	1,465	1,429	1,420
Hepatitis, serum	2	7	7	70	70	45
Leprosy	--	--	3	13	6	15
Leptospirosis	1	--	--	1	3	2
Lymphogranuloma venereum	1	5	2	15	26	24
Malaria	3	12	6	27	39	27
Measles	221	383	443	52,101	29,889	65,743
Meningococcal infections	6	10	10	125	197	200
Mumps	534	600	1,181	16,577	30,252	28,348
Pertussis (whooping cough)	357	215	269	2,081	1,724	4,331
Plague	--	--	--	--	1	--
Poliomyelitis—						
Total	93	318	343	597	1,646	1,394
Paralytic	33	206	170	201	1,082	711
Nonparalytic	60	112	173	396	564	683
Psittacosis	1	3	3	24	28	28
Q fever [3]	3	3	3	38	52	11
Rabies, animal	18	9	35	138	246	257
Rabies, human	--	--	--	1	--	--
Relapsing fever	1	--	--	3	--	1
Rheumatic fever	17	--	16	109	100	163
Rocky Mountain spotted fever	--	--	1	--	1	3
Salmonellosis	141	60	70	1,143	868	740
Shigellosis	168	157	116	1,229	1,289	890
Smallpox	--	--	--	--	--	--
Streptococcal infections (including scarlet fever)	213	202	140	6,355	4,124	6,149
Syphilis	409[a]	441	457	4,503[b]	4,639	5,207
Tetanus	5	2	5	22	24	28
Trachoma	--	--	4	81	4	6
Trichinosis	--	1	--	7	9	4
Tuberculosis	433	483	620	4,967	5,387	5,525
Tularemia	1	--	1	2	4	3
Typhoid fever	10	13	8	47	80	71
Typhus fever, endemic	3	--	--	6	2	1
Typhus fever, epidemic	--	--	--	--	--	2
Yellow fever	--	--	--	--	--	--

[1] Since July 1, 1955, active primary (including cavitary) and disseminated coccidioidomycosis reportable.
[2] Encephalitis, acute includes arthropod-borne infections, post infectious cases, and those with etiology undetermined.
[3] NR—Not reportable prior to July 1, 1955.
[a] Excludes 3,198 cases found positive by special serologic survey (Mexican National Farm Workers at Border Reception Center, El Centro).
[b] Excludes 9,695 cases found positive by special serologic survey (Mexican National Farm Workers at Border Reception Center, El Centro).

Last year 7,463 physicians received first licenses to practice medicine and surgery.—*California Medicine*, September 1, 1957.

Last year the greatest number of licenses, 1,745, to practice medicine was issued by California.—*California Medicine*, September 1, 1957.

Public Health Positions

Contra Costa County

Public Health Nurse: Salary range, $414 to $496. Requires P. H. N. and California driver's license.

Supervising Public Health Nurse, Grade I: Salary range, $496 to $596. Requires P. H. N., college degree and three years of public health nursing experience.

Public Health Microbiologist: Salary range, $395 to $474. Requires California license.

Sanitarian: Salary range, $414 to $496. Requires California registration.

Supervising Sanitarian: Salary range, $496 to $596. Requires California registration and three years' experience.

Apply Contra Costa County Civil Service, Box 710, Martinez.

Humboldt County

Public Health Nurse: Salary range, $392 to $491. Generalized program with some school nursing. California driver's license required. Apply to Dr. L. S. McLean, Director, Humboldt-Del Norte County Health Department, P. O. Box 857, Eureka.

Kern County

Public Health Physician: Salary range, $673 to $818. Must be licensed to practice medicine in California. Applicants with public health experience will be given preference. Write William C. Buss, M.D., Health Officer, Kern County Health Department, P. O. Box 997, Bakersfield.

Merced County

Director of Public Health Nursing: Salary range, $436 to $530. Education and experience considered in recruiting above first step. Applicant should have demonstrated administrative ability and three years of professional public health nursing experience. California certificate of public health nursing, bachelor's degree and completion of an accredited program of study in public health required. Write A. Frank Brewer, M.D., Health Officer, Merced County Department of Public Health, P. O. Box 1350, Merced.

San Joaquin Local Health District

Public Health Nurse: Salary range, $392 to $478. Four positions available.

Sanitarian: Salary range, $392 to $478. One position open.

Physical Therapist: Salary range, $392 to $478. One position open.

Health Educator: Salary range, $455 to $553. One position open.

For further details write E. M. Bingham, M.D., San Joaquin Local Health District, P. O. Box 2009, Stockton.

Ventura County

Public Health Microbiologist: Salary range, $387 to $427. Requires California certification. Write Personnel Department, Courthouse, Ventura.

California's Population Up 560,000 Since 1956

Current estimates, as of July 1, 1957, place California's population at 14,160,000, an increase of 560,000 or 4.1 percent since July 1, 1956. Los Angeles County showed, by far, the greatest numerical increase as 210,800 additional persons were listed as residents of the county, bringing its estimated population to 5,598,300. This was an increase of 3.9 percent over last year's total.

Counties showing the greatest percent gain in population were: Orange, 18.2 percent or 80,900; Trinity, 14.5 percent or 1,000; Del Norte, 12.3 percent or 2,100; and Santa Clara, 10.6 percent or 50,700. Orange and Santa Clara Counties follow Los Angeles County in total population gain.

San Francisco County's population decreased by 7,100. In addition, nine other counties, primarily the small mountain counties, saw a drop in their population. They were: Amador, Inyo, Lassen, Mendocino, Modoc, Nevada, Plumas, Siskiyou and Yuba.

San Diego County, population 900,400; Alameda County, population 873,900; and San Francisco County population 776,000, follow Los Angeles County in total population in the State.

The population estimates were compiled by the California State Department of Finance. Estimates of population change are based on revised 1956 data.

An estimated 10 percent of public school children in the United States are emotionally disturbed.—*Mental Hygiene News Bulletin*, June, 1957.

GOODWIN J. KNIGHT, Governor
MALCOLM H. MERRILL, M.D., M.P.H.
State Director of Public Health

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